



Sample rate:	44.1, 48, 176.4, or 192 kHz (internally up to 768kHz)
Diversity delay for HD/DAB:	12.5 seconds
Maximum MicroMPX output IP/port combinations:	100
Low latency output:	4.5 ms
Frequency Response:	20 Hz to 20 kHz
Signal to Noise Ratio:	Greater than -85dBu
System Distortion:	0.01% THD
Stereo Separation:	74 dB typical 70 dB minimum
Digital Output Level:	-30.0dBFS to 0.0dBFS
Stereo Baseband Output:	-8dBu to +22dBu
Analog I/O:	(2) Left/Right balanced Stereo Inputs and (2) stereo Outputs w/ XLR connectors
A/D Conversion:	24 bit 128x over-sampled delta sigma converter
D/A Conversion:	24-bit 128x oversampled
Digital I/O:	(4) AES/EBU stereo inputs w/ XLR connectors and (4) AES/EBU stereo outputs w/XLR connectors
MPX input and output:	1 input, 2 output BNC. All other inputs and outputs can also be used for MPX.
Ethernet:	(2) RJ45 w/100 and 1000-T Ethernet connections
USB:	(4) USB 3
Power Requirements:	100-240 VAC 50-60Hz
Power Connector:	IEC Male connector
Power Supply:	Internal

Specifications are subject to change without notice.

STXtreme

AUDIO PROCESSOR



Meet STXtreme.

Thimeo Audio Technology's top of the line powerful, innovative, flexible and easy to use audio processor. Your station will stand out with an STXtreme because of its audio quality, clarity, dynamics and loudness.

We've taken a unique innovative approach to processing that gives you the best sounding audio without the need for multiple boxes. Unlike traditional processors that simply process the audio, we repair the audio first and then process it. This gives you the best sounding audio all in one box.

Our versatile STXtreme can be used for FM, HD, DAB, streaming and AM. It offers the unique ability to transmit AM, FM, and streaming at the same time. It is also reconfigurable so that it can be repurposed depending on your need. It can also process multiple stations at one time.



Key features:

Our Quick set up:

Allows you to set up audio parameters, processing parameters and repair parameters making getting on the air within minutes easy.

Seven easy sliders:

Adjusts audio easily without delving into menus.

MicroMPX:

The industry standard STL codec designed by Thimeo Audio Technology and used by processing, codec and transmitter manufacturers worldwide. MicroMPX gives you the capability of sending a full FM signal at bitrates as low as 320kbps. MicroMPX can send the full FM signal including RDS data to multiple FM transmitters. MicroMPX can also be used for off-site monitoring of streams.

MicroMPX+:

MicroMPX+ gives you the ability to send full FM signal at rates as low as 176kbps, making it ideal for satellite, 4G links.



Built-in set of analysis tools:

Including digital oscilloscope, FFT spectrum analyzer and many other features making audio adjustments easily.

Perfect Declipper:

Repairs and restores peaks from clipped audio, removes distortion, and restores dynamics. It's perfect for repairing audio that has been damaged by clipping during mastering.

Delossifier:

Improves the sound of audio compressed with MPEG2/MP3. It reduces pre-ringing and fills spectrum gaps.

Dehummer:

Removes unwanted constant sounds, such as 50/60Hz from bad cables.

Noise Gate:

Removes background noise, which may occur in older recordings.

Phase repair:

Repairs phase issues in audio such as timing misalignment and overly large phase differences.

Natural Dynamics:

Restores dynamic range and punch in compressed recordings.

Speech detection:

When broadcasting voice only such as during news or sports, you may want different processing, and this automatically detects it and switches to the processing best suited for the audio.

Adaptive Compressor:

Our powerful adaptive compressor dynamically adapts its behaviour to the input. Because of that it can handle massive volume differences, eliminating the need for multiple stages such as AGC and multiple multiband compressors stages. The resulting audio is more consistent than it would be with these separate stages, and simultaneously can be much more open. It is also much easier to adjust.

The adaptive multiband compressor can run from 2 to 9 bands, a traditional dynamics design with 1 to 4 band AGC and two 2 to 9 band multiband compressors is also available.

True Bass:

Generate lowers harmonics (deep bass tones) that are missing from the original recordings.

Bass Exciter:

Creates bass harmonics which will help enhance the bass on smaller speakers which aren't always suited to show off the bass.

BS412 limiter:

Our implementation uses multiple methods to predict future audio to minimize unnecessary effects on audio and maintain consistency in audio.

Intelligent Composite Clipper:

Gives you 2-3dB more loudness than traditional clipping. Your audio will be louder, more dynamic, less clipped sounding, with better stereo and more highs. It will also increase the stereo reception area, and actively protect against multipath reception issues.

AM Brilliance:

Reshapes the audio highs to be pleasantly audible on AM, improving intelligibility.

RDS/RDS2 built in encoders:

Full fledged RDS encoder, with remote control via among others UECF and ASCII commands. With RDS2, stations can send logos, and long PS texts with a maximum of 32 UTF-8 bytes, meaning character coding in all languages worldwide is possible.

Streaming:

IceCast streaming with support for AAC, HE-AAC, HE-AAC 2, MP3 and ogg/Vobis. Kantar, Nielsen and Intrasonics watermarking

BIMP:

Two built in microphone processors eliminating the need for an external box.

HTML 5 web interface, JSON remote control interface:

Access your box from any tablet, phone, PC or MAC – anything with a modern browser.

Touchscreen

Fast and simple software updates

About Thimeo Audio Technology:

Thimeo is universally recognized as a worldwide technological leader with their cutting-edge, multiple-award winning audio processing solutions.

They revolutionized the audio processing industry with Stereo Tool, MicroMPX, Perfect Declipper and many other innovative products.

Thimeo also offers a full range of OEM product offerings available for manufacturers.

With over 17,000 products in use globally, Thimeo continues to set the standard in innovation and audio quality for broadcasters everywhere.

Product offerings and reseller information: <https://www.thimeo.com>